



The Researcher's Dilemma

***When Technology Success Causes
Great Communities to Fail
(at Mission-oriented R&D Agencies)***

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Mr. Schmidt Goes to Washington:

Observations from Serving at DARPA



What's wrong with this picture?

Perceived R&D
Commoditization

- IT has never been more strategic to DoD success...
...yet ITO faces **enormous** budget cuts
- Revolutionary IT breakthroughs take decades to mature...
...yet ITO programs must now meet 12-18 month milestones & deliverables in order to start & survive
- Much of the IT industry is in shambles...
...yet many still expect that industry alone will solve long-term SDP R&D challenges

Poor Planning
& Execution

- Other disciplines are successful in (a) marketing themselves to sponsors & (b) motivating their members to serve stints in government funding agencies...
...yet IT (a) remains a mystery to most authorizers, appropriators, & administrators & (b) it's hard to motivate IT members to serve our community in Washington DC

Causes of Perceived IT R&D Commoditization



- The “transformation” agenda applies both to system acquisition **and** IT R&D
 - Lacking a compelling perceived threat, the focus is on “efficiency”
 - Goal is to ensure we’re prepared to win future conflicts, rather than past ones
- The ITO Researcher’s Dilemma: Technology “push” is insufficient to motivate advanced IT R&D in the absence of service/customer “pull”
 - Cause & effect relationships between funding levels & payoffs are articulated poorly
- We need to proactively understand & **shape** the future needs of our consumers/sponsors & tout transition successes broadly & continuously

Consequences of Poor Community Planning & Execution

- Meteoric rise in IT pervasiveness has made us “soft”
 - We can’t live off the Internet forever...
- We all want good PMs or ODs, but we’re not all willing to make the commitment
 - Tragedy of the commons
- We need to
 - Understand the perspective of the authorizers/appropriators & couch our technology as solutions to key national security problems and
 - Implement better incentives for government service

IT R&D in mission-oriented agencies is too important to US national security & economic prosperity to be left to chance

We need your help & commitment to ensure long-term viability of IT R&D